Ser. No. 10/540308

Response to Office Action of 111907

Atty Docket 117163.00129

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (currently amended) An implantable cardiac stimulator, in particular a cardiac

pacemaker or cardioverter/defibrillator (ICD), comprising a ventricular detection unit (VS)

which is to be connected to an intracardiac electrode and is adapted to record and

detect ventricular events, and a ventricular stimulation unit (VP) which is to be

connected to a ventricular electrode and is adapted to produce ventricular stimulation

pulses for delivery to the ventricle of a heart, and a control unit which is connected to the

ventricular detection unit (VS) and to the ventricular stimulation unit (VP) and is adapted

to actuate the ventricular stimulation unit (VP) in a VVI mode in ventricle-inhibited

fashion in such a way that a ventricular stimulation pulse is triggered at a moment in

time predetermined by a stimulation rate if it is not inhibited by detection of a natural

ventricular contraction by means of the ventricular detection unit (VS) within a

predetermined time window, characterized in that wherein the control unit is adapted to

determine an intrinsic rate and a stimulation rate, where the intrinsic rate is appropriate

to the physiological demand and the predetermine a stimulation rate which is higher

than an in particular the intrinsic rate appropriate to the physiological demand.

2. (currently amended) A cardiac stimulator as set forth in claim 1 characterized in that

wherein the control unit is adapted to predetermine a fixed stimulation rate of between

70 and 90 per minute, preferably about 80 per minute.

3. (currently amended) A cardiac stimulator as set forth in claim 1 characterized in that

 $\underline{\text{wherein}}_{\text{the control unit is adapted to predetermine a variable stimulation rate in}}$

dependence on indirectly or directly detected transconductions of atrial stimuli by way of

an AV node of a heart from the atrium to the ventricle of the heart, in such a way that the

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number of transconductions or the number of transconducted stimuli within a

predetermined time or in relation to a predetermined number of ventricular events does

not exceed a predetermined degree.

4. (currently amended) A cardiac stimulator as set forth in claim 3 characterized in that

 $\underline{\text{wherein}} \text{ the control unit is adapted to increase the variable stimulation rate if the number}$

of transconductions or the number of transconducted stimuli exceeds the predetermined

degree.

5. (previously presented) A cardiac stimulator as set forth in claim 4, wherein the

predetermined degree is a single transconduction or a single transconducted stimulus.

6. (previously presented) A cardiac stimulator as set forth in claim 4, wherein the

predetermined degree is between 10 and 20% of transconductions or between 10 and

20% of transconducted stimuli in relation to a total number of ventricular events.

7. (previously presented) A cardiac stimulator as set forth in claim 6, wherein the control

unit is adapted to set a ventricular stimulation rate in dependence on the number of

episodes of ventricular tachycardia within a predetermined period of time or in relation to

a predetermined number of ventricular events.

8. (previously presented) A cardiac stimulator as set forth in claim 7, wherein the control

unit is adapted to increase the variable stimulation rate when the number of episodes of

ventricular tachycardia exceeds a predetermined limit value.

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9. (previously presented) A cardiac stimulator as set forth in claim 8, wherein the

predetermined limit value is 5% of episodes of ventricular tachycardia in relation to the

total number of ventricular events.

10. (previously presented) A cardiac stimulator as set forth in claim 1, wherein the control

unit is adapted to form an overstimulation rate as a variable stimulation rate from an

atrially detected intrinsic base rate or a physiologically adequate base rate ascertained

by detection and evaluation of a physiological demand of a patient, in such a way that

the overstimulation rate is higher than the base rate by a difference rate.

11. (previously presented) A cardiac stimulator as set forth in claim 10, wherein the control

unit is adapted to set the difference rate in dependence on the number of detected

stimulus transconductions from the atrium to the ventricle within a predetermined

retrospective period of time, in such a way that the control unit increases the difference

rate if the number of detected stimulus transconductions exceeds a predetermined

degree.

12. (previously presented) A cardiac stimulator as set forth in claim 4, wherein the control

unit is adapted to gradually reduce the variable stimulation rate until an increase in the

variable stimulation rate occurs again.

13. (previously presented) A cardiac stimulator as set forth in claim 8, wherein the control

unit is adapted to gradually reduce the variable stimulation rate until an increase in the

variable stimulation rate occurs again.

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14. (previously presented) A cardiac stimulator as set forth in claim 10, wherein the control

unit is adapted to gradually reduce the variable stimulation rate until an increase in the

variable stimulation rate occurs again.

15. (previously presented) A cardiac stimulator as set forth in claim 3 wherein the

predetermined degree is a single transconduction or a single transconducted stimulus.

16. (previously presented) A cardiac stimulator as set forth in claim 3 wherein the

predetermined degree is between 10 and 20% of transconductions or between 10 and

20% of transconducted stimuli in relation to a total number of ventricular events.

17. (previously presented) A cardiac stimulator as set forth in claim 1, wherein the control

unit is adapted to set a ventricular stimulation rate in dependence on the number of

episodes of ventricular tachycardia within a predetermined period of time or in relation to

a predetermined number of ventricular events.

18. (previously presented) A cardiac stimulator as set forth in claim 2, wherein the control

unit is adapted to set a ventricular stimulation rate in dependence on the number of

episodes of ventricular tachycardia within a predetermined period of time or in relation to

a predetermined number of ventricular events.

19. (previously presented) A cardiac stimulator as set forth in claim 3, wherein the control

unit is adapted to set a ventricular stimulation rate in dependence on the number of

episodes of ventricular tachycardia within a predetermined period of time or in relation to

a predetermined number of ventricular events.

20. (cancelled)

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21. (new) A cardiac stimulator as set forth in claim 1, wherein the cardiac stimulator is adapted to operate to provide a stimulation rate continually, and wherein the stimulation rate is greater than a natural heart rate of a patient and less than a tachycardia rate.